REMARKS

The Office Action has been carefully reviewed. No claim is allowed. Claims 1-3 and 5-9 presently appear in this application and define patentable subject matter warranting their allowance. Reconsideration and allowance are hereby respectfully solicited.

New claim 9 is supported in the specification at page 10, first paragraph.

Claims 1-3 and 5-8 have been rejected under 35 U.S.C. §112, first paragraph, because the examiner states that the specification, while being enabling for a process for the recovery of a chemokine of SEQ ID NO:1, does not reasonably provide enablement for recovering all chemokine molecules expressed in prokaryotic host cells as inclusion bodies. This rejection is respectfully traversed.

As taught at page 10, first paragraph of the present specification:

> Chemokines constitute a family of small proinflammatory cytokines with leukocyte chemotactic and activating properties. Depending on the position of the first cysteines, the chemokine family can be divided in C-C, C-X-C and C-X_3-C chemokines….

The chemokines are known to share numerous features, such as the presence at conserved positions of cysteine residues forming disulfide bonds, conserved amino acid structures, similar 3-D

structures, short N-term chains and long C-term chains, receptor binding via N-term chains (see page 13 and figure 2 of "The Chemokine Factsbook", 1997; figure 1 of Baggiolini et al., 1994; page 357 of Taub, 1996, copies of which are being submitted herewith in an IDS).

The chemokine of SEQ ID NO:1, which is a RANTES mutant and the recovery of which the examiner acknowledges as being enabled for the presently claimed process, belongs to the group of C-C chemokines. Although this protein contains point mutations, it conserves the basic amino acid structure of C-C chemokines, i.e. -C-C-X_{22-23}-C-X_{15}-C- (see figure 1 of the Taub 1996 reference, cited on page 10 of the present specification). This mutant still binds the CCR5 receptor similar to the wild type RANTES protein (see page 18, lines 1-2 of W0 02/28419, a coy of which was submitted with the IDS filed July 14, 2006). As would be recognized and understood by one of skill in the art, such similar binding implies that the three dimensional conformation of the wild type protein is maintained in the mutant protein, and therefore it has a similar structure/conformation to wild-type RANTES, as well as to other chemokines.

Because of the many similarities/correlations, notably with regard to the structure/conformation, between the different types of chemokines, as established in the prior art, one of

skill in the art would have no doubt that he could purify any chemokine according to the presently claimed method based on the guidance of a single working example for a triple RANTES mutant in the present specification. This same person would have a reasonable expectation that the presently claimed process can be applied to the recovery of any chemokine expressed in prokaryotic host cells as inclusion bodies.

There is no requirement that every possible embodiment of a claim be supported by a working example, i.e., there is no need to provide a working example for every existing chemokine. Due to the similarities/correlations between the different chemokines, which is well known in the art as discussed above, the single working example with a triple RANTES mutant in the present specification is sufficient to provide guidance that enables one of skill in the art to extend the presently claimed process to other chemokines.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Claims 1-3 and 6-8 have been rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the

claimed invention. The examiner asserts that there is no disclosure of chemokines other than RANTES of SEQ 10 NO:1, and thus that the applicants have not fully described the genus of the instant invention. This rejection is respectfully traversed.

Similar to what was pointed out above with respect to enablement, there is also no need to describe every chemokine useful in the process according to the present invention in order to show possession of the claimed invention. Indeed, it is understood from MPEP §2164.01 and §2164.05(a), that a "patent need not teach, and preferably omits, what is well known in the art". This is the case with chemokines for use in the presently claimed process. See, for example, the references/reviews cited on page 10, first paragraph of the present specification and "The Chemokine FactsBook", 1997 (copies of which are being submitted herewith in an IDS), representative of numerous textbooks relating wholly or in part to chemokines available in the prior art. In accordance with the MPEP, applicants did not describe every chemokine known in the art but rather cited references at page 10, first paragraph of the present specification, that provide disclosures and teachings of the well known genus of chemokines (i.e., the C-C, C-X-C and C-X_3-C chemokines) which the triple RANTES mutant in the working example is representative of based on similarity in structure/conformation. Applicants should

also wish to point out that applicants are not claiming a product (for which the bar of written description may be higher) but rather a method for recovering chemokines, a group which were well known in the art at the time the invention was made and which are structurally very similar.

Reconsideration and withdrawal of the rejection are therefore respectfully requested.

In view of the above, the claims comply with 35 U.S.C. §112 and define patentable subject matter warranting their allowance. Favorable consideration and early allowance are earnestly urged.

Respectfully submitted,

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